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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,578	04/08/2004	Lott Johnson	5115-001	8573

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RALEIGH, NC 27602

EXAMINER

BOSWELL, CHRISTOPHER J

ART UNIT	PAPER NUMBER
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3676

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/820,578	Applicant(s) JOHNSON, LOTT	
	Examiner Christopher Boswell	Art Unit 3676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 18-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 18-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

In view of the appeal brief filed on January 11, 2006, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:


BRIAN E. GLESSNER
SUPERVISORY PATENT EXAMINER

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-15 and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 3,016,968 to Lenz et al., in view of U.S. Patent Number 4,170,374 to Garcia.

Lenz et al. disclose the invention substantially as claimed. Lenz et al. disclose a vacuum actuated door latching assembly having a latch (figure 2) operatively associated with the door (1), a pneumatic actuator (26) operatively associated with the latch for causing the latch to move between the locked and unlocked positions, a vacuum line (37) connected to the pneumatic actuator and adapted to connect to a vacuum source (41) associated with the vehicle, and a control valve (39) disposed between the vacuum source and the pneumatic actuator for controlling the activation of the pneumatic actuator, as in claim 1. However, Lenz et al. does not disclose a biasing device engaging the door. Garcia teaches of an automatic vehicle door latching assembly (22) having a latch (30) and a biasing device (49) engaging a door (20) in the same field of endeavor for the purpose of biasing the door towards an open position (column 4, lines 37-44), where the biasing device has a spring (54), as in claim 6, where the spring is adapted to extend between a stop (74) disposed on the door and an area (42) adjacent the door, and wherein the position of the spring is adjustable with respect to the door (by adjusting the length of the shank 52), as in claim 7, where the spring is partially contained within a sleeve (50, i.e. a boot), as in claim 8, and wherein the spring is fixed to a bolt (52) that extends partially through the sleeve (portion of 50 that extends over the spring, figures 2 and 3), wherein Garcia does not disclose a threaded bolt, however, it would have been obvious to one with ordinary skill

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in the art at the time the invention was made to adapt the use of the shank to be threaded such that the threaded shank can move back and forth axially within a threaded support so as to adjust the position of the spring with respect to the door, which can be adjusted with respect to the door, as in claim 9. It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate a biasing device near the latch of Lenz et al., as taught by Garcia, in order to bias the door to an open position, such that it decreases the amount of work needed to open the door.

Lenz et al. also discloses the latch having a locking lever (5) that is pivotally mounted and movable between a locked and unlocked position, wherein the pneumatic actuator includes an arm (30) that engages the locking member and moves the locking member in at least one direction between the locked and unlocked positions (column 2, lines 7-20), as in claim 2, as well as a conventional key lock (22) but wherein the pneumatic actuator is operative to actuate the latch independent of the key lock (column 1, lines 17-21), as in claim 3.

Lenz et al. further disclose the locking lever is of a generally L-shape and includes a terminal end portion (figure 2) that includes a catch (9) for engaging a receiver (4) secured to the door to be latched, as in claim 4, and further including a vehicle (3) having a load compartment (2) and a door (1) that permits access to the load compartment and wherein the latching assembly is mounted adjacent the door (figure 1) and wherein the vehicle includes an engine (column 2, lines 24-26) that serves as the vacuum source for actuating the pneumatic actuator, as in claim 5.

Lenz additionally discloses a vehicle having a vacuum actuated latch assembly for latching an access door to a load compartment (figure 1), comprising an engine (column 2, lines

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24-26) for powering the vehicle, a compartment (2) for receiving and holding a load, a door (1) that pivotally or rotationally slides with respect to the compartment, for permitting access to the compartment of the vehicle, a vacuum actuated latch assembly (figure 2) for automatically unlocking the door, the vacuum actuated latch assembly having a latch (figure 2) operatively associated with a door for locking the door, the latch being movable between a locked and an unlocked position, a pneumatic actuator (26) operatively associated with said latch for causing the same to move between the locked and unlocked position, a vacuum line (37) connected to the pneumatic actuator and extending to the engine of the vehicle such that the engine of the vehicle serves as a vacuum source for the pneumatic actuator, and a control valve (39) disposed between the engine and the pneumatic actuator for controlling the actuation of the pneumatic actuator, as in claim 10. However, Lenz et al. does not disclose a biasing device engaging a door. Garcia teaches of an automatic vehicle door latching assembly (22) having a latch (30) and a biasing device (49) for engaging a sliding door (20) and biasing the door towards an open position (the spring force urges the keeper, an integral part of the door, toward the open position of the latch), the biasing device being spaced from the latch assembly (figure 2) and operable independently of the latch assembly (the biasing acts directly opposite and independent of the latching motion, wherein the spring biases the latch against the force of the door), and wherein the biasing device includes a spring (54) disposed adjacent the door and positioned with respect to the door such that when the door assumes a closed position, the spring engages the door and is compressed by the sliding door (column 4, lines 37-44), and wherein when the latch is moved from the locked position to the unlocked position the spring forces the sliding door to open (when the latch is moved from the locked position to the unlocked position, the force of the spring biases the door

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to an open position), where the spring is at least partially housed within an elongated sleeve (portion of 50 envelopes the uppermost portion of the spring) that is fixed adjacent the sliding door (figure 2), and wherein the spring is secured to a bolt (52), wherein Garcia does not disclose a threaded bolt, however, it would have been obvious to one with ordinary skill in the art at the time the invention was made to adapt the use of the shank to be threaded such that the threaded bolt can move back and forth axially within a threaded support so as to adjust the position of the spring with respect to the door, as in claim 21, in the same field of endeavor for the purpose of biasing the door towards an open position (column 4, lines 37-44). It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate a biasing device near the latch of Lenz et al., as taught by Garcia, in order to bias the door to an open position, such that it decreases the amount of work needed to open the door.

Lenz et al. also disclose the pneumatic actuator includes a pneumatic cylinder (figure 2), as in claim 11, as well as the latch includes a locking lever (5) for engaging a receiver (4) secured to the door, and wherein the pneumatic actuator includes an arm (30) for engaging and moving the locking lever from a locked position to an unlocked position, as in claim 12, and where the pneumatic actuator can only be actuated to unlatch the latch when the engine of the vehicle is running (column 2, lines 21-29), as in claim 13, wherein the latch normally assumes a locked position, and wherein the arm that extends from the pneumatic actuator is operative upon the actuation of the pneumatic actuator to engage the latch and move the latch to the unlocked position (column 2, lines 29-44), as in claim 14,

Lenz et al. further discloses a method of unlocking a door to a load compartment of a vehicle by directing a vacuum from an engine of the vehicle through a line to a pneumatic actuator that is operatively associated with a latch that operates to lock the access door and which is movable between a locked position and an unlocked position (column 2, lines 21-29), utilizing the vacuum to actuate the pneumatic actuator and wherein the actuation of the pneumatic actuator results in the actuator engaging the latch and moving the latch from the locked position to the unlocked position, permitting the access door to open (column 2, lines 7-20), shutting the engine off, and closing the access door causing the latch to lock the access door (column 1, lines 45-49), as in claim 15. However, Lenz et al. does not disclose a biasing device engaging the door. Garcia teaches of an automatic vehicle door latching assembly (22) having a latch (30) and a biasing device (49) that biases a access door (20) towards an open position while the latch assumes the locked position and locks the access door closed (column 4, lines 37-44), wherein biasing the access door towards an open position includes securing a spring (54) adjacent to the access door and extending the spring to where the spring engages a stop (74) that extends from the access door such that the spring pushes on the stop and effectively biases the access door towards an open position (opposite motion of column 4, lines 37-44), and wherein the biasing of the access door towards the open position is independent of the latch that operates to lock the access door (the biasing acts directly opposite and independent of the latching motion, wherein the spring biases the latch against the force of the door), and wherein when the latch is moved from the locked position to the unlocked position, the spring causes the door to move towards the open position (the spring force urges the keeper, an integral part of the door, toward the open position of the latch) in the same field of endeavor for the purpose of biasing the door towards an

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open position (column 4, lines 37-44). It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate a biasing device near the latch of Lenz et al., as taught by Garcia, in order to bias the door to an open position, such that it decreases the amount of work needed to open the door.

Lenz et al. additionally discloses actuating a control valve that is effective to permit the vacuum to reach the pneumatic actuator and wherein when the vacuum reaches the pneumatic actuator, the pneumatic actuator is actuated which results in the latch being engaged and moved to the unlocked position (column 2, lines 29-36), as in claim 18.

Lenz et al. also disclose the pneumatic actuator has an arm that extends past a portion of a locking lever that forms a part of the latch assembly, wherein the actuation of the pneumatic actuator causes the arm to move and to engage a portion of the locking lever which results in the locking lever being pulled from its locked position to an unlocked position (column 2, lines 7-20), as in claim 19, wherein the locking lever is pivotally mounted for movement about an axis and wherein the actuation of the pneumatic actuator causes the locking lever to rotate from a locked position to an unlocked position (column 1, lines 41-45), as in claim 20.

Response to Arguments

Applicant's arguments, filed January 11, 2006, with respect to the rejection(s) of claim(s) 1-15 and 18-21 under 35 USC 102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of a new interpretation of previously applied and cited references, where Lenz et al. provides that vacuum actuated latching assembly and Garcia adds support to the latching assembly by teaching of a biasing device to bias the door towards an open position.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Boswell whose telephone number is (571) 272-7054. The examiner can normally be reached on 9:00 - 4:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on (571) 272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CJB
March 29, 2006


BRIAN E. GLESSNER
SUPERVISORY PATENT EXAMINER